## **SPACE COOPERATION**

Agreement Between the
UNITED STATES OF AMERICA
and GERMANY

Signed at Washington and Bonn December 8 and 13, 2010



## NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966 (80 Stat. 271; 1 U.S.C. 113)—

"...the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence... of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof."

## **GERMANY**

# **Space Cooperation**

Agreement signed at Washington and Bonn December 8 and 13, 2010; Entered into force December 13, 2010.

# Framework Agreement

## between

the National Aeronautics and Space Administration

and

the German Aerospace Center

On Cooperation in Aeronautics and the Exploration and Use of

Outer Space for Peaceful Purposes

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#### Preamble

The National Aeronautics and Space Administration (NASA) and the German Aerospace Center (DLR), hereinafter collectively referred to as "the Parties", or individually as "Party";

**RECALLING** their long and fruitful cooperation in the exploration and peaceful use of outer space, through the successful implementation of cooperative activities in a broad range of areas;

**TAKING NOTE** of the mutual benefit to be gained from working together in the peaceful use of air space and outer space for the welfare of all humankind;

CONSIDERING the desirability of enhanced cooperation between the Parties in human space flight, space science, the use of space for research in the Earth sciences and global change, exploration, and aeronautics, with potential benefits to all nations; and

**DESIRING** to establish an overall legal framework to facilitate the continuance of the Parties' mutually beneficial relationship;

HAVE agreed as follows:

### Article 1 - Purpose

This Framework Agreement, hereinafter referred to as the "Agreement," sets forth the obligations, terms, and conditions for the cooperation between NASA and DLR in the exploration and use of air space and outer space for peaceful purposes in areas of common interest and on the basis of equality and mutual benefit.

#### Article 2 - Definitions

- 1. The term "Related Entity" means:
  - (i) a contractor or subcontractor of a Party at any tier;
  - (ii) a cooperating entity, grantee, or investigator of a Party at any tier; or
  - (iii) a contractor or subcontractor of a cooperating entity, grantee, or investigator of a Party at any tier.

For the purpose of Article 6 (Liability), the term "Related Entity" also means:

- (i) a user or customer of a Party at any tier; or
- (ii) a contractor or subcontractor of a user or customer of a Party at any tier; "contractors" and "subcontractors" include suppliers of any kind.

2. The term "Cooperating Organization" means German entities that have a legal relationship with DLR, including, but not limited to, German institutes and universities.

## Article 3 - Scope of Activities

- 1. The Parties shall identify areas of mutual interest and seek to develop cooperative programs or projects, hereinafter referred to as "Programs," in the exploration and peaceful uses of air space and outer space and shall work closely together to this end.
- 2. These Programs may be undertaken in the following areas of cooperation:
  - a. Earth science, including observation and monitoring;
  - b. Space science;
  - c. Exploration systems;
  - d. Space operations;
  - e. Aeronautics research; and
  - f. Other relevant areas of mutual interest.
- 3. These Programs may be implemented using the following:
  - a. Spacecraft and space research platforms;
  - b. Scientific instruments onboard spacecraft and space research platforms;
  - c. Space operations missions;
  - d. Sounding rocket and scientific balloon flights and campaigns;
  - e. Aircraft flights and campaigns;
  - f. Space communications, including ground-based antennas, for tracking, telemetry, and data acquisition;
  - g. Ground-based research facilities;
  - h. Exchanges of scientific personnel;
  - i. Exchanges of scientific data;
  - j. Participation in joint workshops and meetings;
  - k. Terrestrial analogs;
  - 1. Earth and space applications;
  - m. Education and public outreach activities; and
  - n. Other mechanisms of mutual interest.
- 4. All activities under this Agreement shall be conducted in a manner consistent with the applicable national laws and regulations of the Parties and in accordance with applicable international law.
- 5. This Agreement may apply to cooperative utilization activities undertaken consistent with Article 9 of the Agreement Among the Government of Canada, the Government of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America Concerning Cooperation on the Civil International Space Station, done at Washington on January 29, 1998, or any subsequent agreement that modifies or supersedes that Agreement.

6. These Programs may take place on the surface of the Earth, in air space, or in outer space.

### Article 4 - Implementing Arrangements

- 1. The specific terms and conditions for Programs, and the specific roles and commitments of the Parties, shall be set forth in Implementing Arrangements between the Parties.
- 2. Implementing Arrangements under this Agreement shall include, as appropriate, provisions related to the nature and scope of the Programs and the individual and joint responsibilities of the Parties. Such Implementing Arrangements shall incorporate by reference and be subject to the terms of this Agreement, unless the Parties agree otherwise through specific terms set forth in an Implementing Arrangement.
- 3. DLR may conclude Implementing Arrangements on behalf of Cooperating Organizations.

#### Article 5 - Financial Arrangements

Each Party shall bear the costs of discharging its respective responsibilities, including but not limited to travel and subsistence of personnel and transportation of all equipment and other items for which it is responsible under this Agreement. Further, the Parties agree that the obligations under this Agreement are subject to the availability of appropriated funds and to each Party's respective funding procedures. Should either Party encounter budgetary problems that may affect the activities to be carried out under this Agreement, the Party encountering the problems shall notify and consult with the other Party as soon as possible.

## Article 6 - Liability and Risk of Loss

- 1. Each Party hereby waives any claim against the other Party, employees of the other Party, the other Party's Related Entities, or employees of the other Party's Related Entities for any injury to, or death of, the waiving Party's employees or the employees of its Related Entities, or for damage to, or loss of, the waiving Party's property or the property of its Related Entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.
- 2. Each Party further agrees to extend this cross-waiver to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. Additionally, each Party shall require that its Related Entities extend this cross-waiver to their Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement.

3. In the event of third-party claims for which the Parties may be liable, the Parties shall consult promptly to determine an appropriate and equitable apportionment of any potential liability and on the defense of any such claims.

### Article 7 - Registration of Space Objects

For Implementing Arrangements involving a launch, the Parties shall determine which Party will request its Government to register the spacecraft as a space object in accordance with the Convention on the Registration of Objects Launched into Outer Space, done on January 14, 1975. Registration pursuant to this Article shall not affect the rights or obligations of either Party's Government under the Convention on International Liability for Damage Caused by Space Objects, done on March 29, 1972.

#### Article 8 - Transfer of Goods and Technical Data

The Parties are obligated to transfer only those technical data (including software) and goods necessary to fulfill their respective responsibilities under this Agreement, in accordance with the following provisions, notwithstanding any other provisions of this Agreement:

- 1. All activities under this Agreement shall be carried out in accordance with the Parties' national laws and regulations, including those laws and regulations pertaining to export control and the control of classified information.
- 2. The transfer of technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety shall normally be made without restriction, except as required by paragraph 1, above.
- 3. All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions:
  - a) In the event a Party or its Related Entity finds it necessary to transfer such goods or data, for which protection is to be maintained, such goods shall be specifically identified and such data shall be marked.
  - b) The identification for such goods and the marking on such data shall indicate that the goods and data shall be used by the receiving Party and its Related Entities only for the purposes of fulfilling the receiving Party's or Related Entities' responsibilities under this Agreement, and that such goods and data shall not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party or its Related Entity.
  - c) The receiving Party or Related Entity shall abide by the terms of the notice and protect any such goods and data from unauthorized use and disclosure.
  - d) The Parties to this Agreement shall cause their Related Entities to be bound by the provisions of this Article through contractual mechanisms or equivalent measures.

4. All goods exchanged in the performance of this Agreement shall be used by the receiving Party or Related Entity exclusively for the purposes of the Agreement. Upon completion of the activities under the Agreement, the receiving Party or Related Entity shall return or otherwise dispose of all goods and marked proprietary or export-controlled technical data provided under this Agreement, as directed by the furnishing Party or Related Entity.

## Article 9 - Intellectual Property Rights

- 1. Nothing in this Agreement shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions or works of a Party, or its Related Entities made prior to the entry into force of, or outside the scope of, this Agreement, including any patents (or similar forms of protection in any country) corresponding to such inventions or any copyrights corresponding to such works.
- 2. Any rights to, or interest in, any invention or work made in the performance of this Agreement solely by one Party, or any of its Related Entities, including any patents (or similar forms of protection in any country) corresponding to such invention or any copyright corresponding to such work, shall be owned by such Party, or its Related Entity. Allocation of rights to, or interest in, such invention or work between such Party and its Related Entity shall be determined by applicable laws, rules, regulations, and contractual obligations.
- 3. It is not anticipated that there will be any joint inventions made in the performance of this Agreement. Nevertheless, in the event that an invention is jointly made by the Parties and/or their Related Entities in the performance of this Agreement, the Parties shall, in good faith, consult and agree within 30 calendar days as to:
  - a. the allocation of rights to, or interest in, such joint invention, including any patents (or similar forms of protection in any country) corresponding to such joint invention;
  - b. the responsibilities, costs, and actions to be taken to establish and maintain patents (or similar forms of protection in any country) for each such joint invention; and
  - c. the terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.
- 4. For any work jointly authored by the Parties and/or their Related Entities, should the Parties decide to register the copyright in such work, they shall, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyright protection (in any country).
- 5. Subject to the provisions of Article 8 (Transfer of Goods and Technical Data) and Article 10 (Release of Results and Public Information), each Party shall have an irrevocable royalty-free right, for its own purposes, to reproduce, prepare derivative works, distribute, and present publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this

Agreement, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party.

#### Article 10 - Release of Results and Public Information

- 1. The Parties retain the right to release public information regarding their own activities under this Agreement. The Parties shall coordinate with each other in advance concerning releasing to the public information that relates to the other Party's responsibilities or performance under this Agreement.
- The Parties shall make the final results obtained from Programs available to the general
  scientific community through publication in appropriate journals or by presentations at
  scientific conferences as soon as possible and in a manner consistent with good
  scientific practices.
- 3. The Parties shall include provisions for the sharing of science data in the Implementing Arrangements.
- 4. The Parties acknowledge that the following data or information does not constitute public information and that such data or information shall not be included in any publication or presentation by a Party under this Article without the other Party's prior written permission:
  - a. data furnished by the other Party in accordance with Article 8 (Transfer of Goods and Technical Data) of this Agreement that is export-controlled or proprietary; or
  - b. information about an invention of the other Party before a patent application has been filed covering the same, or a decision not to file has been made.

#### Article 11 - Customs Duties and Taxes

Each Party shall facilitate free customs clearance and waiver of all applicable customs duties and taxes, regardless of point of entry, for goods necessary for the implementation of this Agreement. In the event that any customs duties or taxes of any kind are nonetheless levied on such equipment and related goods, such customs duties or taxes shall be borne by the Party of the country levying such customs duties or taxes.

### Article 12 - Exchange, Entry and Exit of Personnel

1. To facilitate coordination related to Programs conducted pursuant to this Agreement, the Parties may support the exchange of a limited number of personnel, at a time and under conditions mutually agreed between them. Such arrangements may include provision of office space and administrative support at the host location. Salary and other expenses of the personnel shall be borne by the sending Party for the duration of the assignment.

2. Each Party shall use reasonable efforts to facilitate the entry into, temporary residence in, and exit from its territory of personnel engaged in Programs pursuant to this Agreement.

## Article 13 - Overflight

Each Party shall facilitate, upon request from the other Party, the provision of aircraft and balloon overflight clearances, as necessary.

## Article 14 - Consultation and Dispute Resolution

- 1. The Parties shall consult, as appropriate, to review the implementation of Programs undertaken pursuant to this Agreement and to exchange views on potential areas of future cooperation.
- 2. In the event issues arise regarding the interpretation or implementation of this Agreement, the Program Managers identified in the relevant Implementing Arrangement shall consult promptly to seek resolution of the issues. Any dispute on which the Program Managers are unable to reach agreement shall be referred to the appropriate senior-level officials for joint resolution.

#### Article 15 - Amendments

The Parties may amend this Agreement by mutual written agreement.

#### Article 16 - Entry Into Force and Duration

This Agreement shall enter into force on the date of last signature. This Agreement shall remain in force for ten (10) years unless extended by written agreement of the Parties or terminated in accordance with the provisions of Article 17.

#### Article 17 - Termination

- 1. Either Party may terminate this Agreement by providing at least six months' written notice to the other Party.
- 2. Notwithstanding the termination or expiration of this Agreement, its provisions shall continue to apply to cooperation under any Implementing Arrangements in effect at the time of termination or expiration, for the duration of such Implementing Arrangements.
- 3. Notwithstanding termination or expiration of this Agreement or any Implementing Arrangements concluded hereunder, the obligations of the Parties set forth in Article 6 (Liability and Risk of Loss), Article 8 (Transfer of Goods and Technical Data) and Article 9 (Intellectual Property Rights) shall continue to apply.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Agreement.

Done at Washington this 8th day of December, 2010, and at Bonn this 13th day of December, 2010.

For the National Aeronautics and Space Administration (NASA)

For the German Aerospace Center (DLR)

Charles F. Bolden Jr. Administrator

Prof. Dr. Johann-Dietrich Wörner Chairman of the Executive Board

Christoph Hohage
Director Space Projects